

THAT WHICH IS CLAIMED IS:

1. An apparatus for engaging the center hub of an optical media disc comprising:

a pick having a first end, a second end, and defining a sleeve therebetween, the first end defining a base adapted for attachment to a positioning member and the second end defining a tip;

an axial passage defined by the pick and extending the length of the pick, the axial passage further defining an interior cross-sectional area along the base and the sleeve which is greater than the cross-sectional area of the axial passage defined within the tip;

the tip defining a plurality of slits, each one of said plurality of slits positioned substantially equidistance from each of an adjacent slit;

the tip defining a circular notch within an exterior surface of the tip;

wherein when the tip of the pick is inserted into a hub aperture of a media disc, the tip is pushed outwardly by a plunger inserted through the sleeve and engaging the axial passage wall of the tip, thereby pressing the notch against the hub, thereby securing the media disc to the pick.

2 The apparatus according to claim 1 wherein said plurality of slits further comprises:

a first slit defined by an exterior wall of the tip and at least a portion of the sleeve, the slit being in communication with the axial passage; and

a second slit defined by an exterior wall of the tip and at least a portion of the sleeve, the slit being in communication with the axial passage, the first and second slit positioned on substantially opposite sides of the pick.

3 The apparatus according to claim 2 wherein said tip defines a taper between the notch and a terminus of the tip.

4. The apparatus according to claim 1 wherein the terminus of the tip defines a blunt surface.

5. The apparatus according to claim 1 wherein the tip further defines a shoulder which protrudes from the tip surface and is adjacent the notch.

6. The apparatus according to claim 1 wherein the notch is engaged by a resilient ring.

7. The apparatus according to claim 2 wherein the tip further defines a third slit and a fourth slit, said third and said fourth slit traversing the tip and at least a portion of the sleeve, said third and said fourth slit being in further communication with the axial passage and being substantially opposite the other.

8. The apparatus according to claim 1 wherein the axial passage of the sleeve houses a ball-bearing, the ball-bearing having an outer diameter greater than a diameter defined by the axial passage defined within the tip.

9. The apparatus according to claim 8 wherein the axial passage of the sleeve further carries a pin extending through the base and provides for selective engagement of the ball-bearing.

10. An apparatus for engaging a center hub of an optical media disc comprising:

a pick having a base, a tip, and an inter-connecting stem, the pick defining an axial passage defined along its length;

a conical taper defined by the exterior wall of the tip, the tip further defining a plurality of slits, each of said slits extending a length of the tip and at least a portion of said stem, each slit in communication with the axial passage;

a plunger operatively engaging the axial passage, the plunger defining a terminal head having a cross-sectional area greater than the cross-sectional area of a portion of the axial passage defined by the tip;

wherein, when the plunger engages the axial passage defined by the tip, the plunger engages the axial passage walls, extending the tip walls in a radial direction and thereby engaging the center hub of a disc.

11. The apparatus according to claim 10 wherein each slit is substantially parallel to the axial passage.

12. The apparatus according to claim 10 wherein the terminus of the tip defines a blunt surface.

13. The apparatus according to claim 10 wherein the tip further defines a shoulder which protrudes from the tip surface and extends circumferentially around the tip.

14. The apparatus according to claim 10 wherein the tip further defines a circular notch along an exterior surface of the tip.

15. The apparatus according to claim 14 wherein the notch is engaged by an "O"-ring.

16. The apparatus according to claim 10 wherein the plunger is provided by a combination of a pin and a ball.

17. The apparatus according to claim 10 wherein one of said each plurality of slits is positioned an equidistance apart.

18. The apparatus according to claim 10 wherein the plurality of slits is four, each slit spaced from each adjacent slit so as to provide for substantially equal segments of the tip.

19. The apparatus according to claim 10 wherein the pick is constructed from a plastic material.

20. An apparatus for the selective engagement and release of a center hub of an optical media disc comprising:

a pick defining an axial passage therethrough, the pick having a first terminus and a second terminus, the second terminus defining a barbed head having a plurality of axially defined segments, each segment formed by a pair of slits extending substantially along the length of the barbed head; and,

a groove defined by an exterior wall of the barbed head.

21. The apparatus according to claim 20 wherein the groove further carries an "O"-ring.

22. The apparatus according to claim 20 wherein the axial passage is adapted for engaging a plunger defining a terminal head having a cross sectional area greater than the cross sectional area of a portion of the axial passage defined by the tip.

23. The apparatus according to claim 20 wherein each of the defined segments are substantially the same size.

24. The apparatus according to claim 20 wherein the barbed head further defines a tapered surface.

25. A process of moving an optical media disc comprising:

providing a pick having a hollow tip operatively engaged by an arm, the tip defining a plurality of segments, each segment being defined in part by a pair of spaced slits in communication with a cavity of the hollow tip;

placing the tip at a first location adjacent an optical media disc;

inserting a portion of the tip through a center ring of the optical media disc;

positioning a plunger within the cavity of the tip, the plunger engaging each segment along an interior wall of the segment, and thereby expanding the circumference of the tip;

engaging the center ring of the optical media disc by the expanding circumference of the tip;

moving the position arm and the tip engaging the first optical media disc to a second location;

withdrawing the plunger from an engaging position within the tip; and

releasing the optical media disc from engagement with the tip.

26. A process according to claim 25 wherein the plunger comprises a positional pin which engages a ball seated within the cavity of the tip.

27. The process according to claim 25 wherein the optical media disc comprises a first disc situated along a stack of similar discs.

28. The process according to claim 25 wherein the second location is a drive tray for the optical media disc.

29. The process according to claim 27 wherein said stack of optical media discs is a horizontal stack.

30. The process according to claim 27 wherein the stack of optical media discs is a vertical stack.

31. The process according to claim 25 comprising the additional step of engaging an optical media disc from the second location using said pick and transporting the optical media disc to a third location.

32. The process according to claim 25 wherein the position arm is mounted on a rail, the arm being positionable along a length of the rail.

33. The process according to claim 32 wherein the positioning arm is pivotable about the rail.

099957-07004
T02020-252/6960